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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/632,037

07/30/2003

Wolfgang Lerche

SWR-0111

9653

7590

03/13/2006

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EXAMINER

ABRAMOWITZ, HOWARD E

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,037

Applicant(s)

LERCHE ET AL.

Examiner

Howard E. Abramowitz

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/30/03, 3/11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group 1 claims 1-12 and 20 in the reply filed on 1/9/06 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "carbon monoxide" in claim 20 is used by the claim to mean "a hydrocarbon", while the accepted meaning is "just a carbonaceous gas as there is no hydrogen present." The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 12 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (US Patent No. 3,892,890).

Referring to claim 1, Watanabe et al. discloses a method for carburizing component comprising subjecting a surface to a heat treatment with simultaneous administration of a carbon emitting medium inside a processing space (column 5 lines 15-25).

Referring to claims 2-4, Watanabe et al. discloses using a pressure of less than 100 torr specifically exemplifying 10 torr (13.3 mbar) (column 14 lines 35-45).

Referring to claims 5-7, Watanabe et al. discloses using a temperature in the range of 450-700 °C (column 7 lines 29-37).

Referring to claim 8, Watanabe et al. discloses the amount of carbon deposited as a function of temperature. Knowing the amount of carbon deposited at a given temperature means that the processing time (time to deposit a given amount of carbon) as a function of temperature is also known as the amount of time must be constant for each deposition temperature (figure 9).

Referring to claim 9, the carbon content is regulated as a function of the temperature as the preheating temperature of the part controls amount of carbon being deposited (figure 4, column 10 lines 23-54). As the amount of carbon deposited influences the amount of carbon in the gaseous state controlling the temperature controls the amount of carbon both on the substrate and in the atmosphere.

Referring to claim 10, 12 and 20, acetylene is a gas as it is administered into the reaction chamber (column 11 lines 37-45).

Claims 1-7, 10-12 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Carlson et al. (US Patent No. 4,060,660).

Referring to claim 1, Carlson et al. discloses a method for carburizing component comprising subjecting a surface to a heat treatment with simultaneous administration of a carbon emitting medium inside a processing space (column 2 lines 4-20).

Referring to claims 2-4, Carlson et al. discloses using a pressure of about 0.5-2.0 torr (.67-2.67 mbar) (column 3 lines 35-38).

Referring to claims 5-7, Carlson et al. discloses using a temperature in the range of 300-550 °C (column 2 lines 4-20).

Referring to claim 10, 12 and 20, acetylene is a gas as it is administered into the reaction chamber (column 2 lines 4-20).

Referring to claim 11, Carlson et al. discloses using Benzene as the precursor which is a liquid before it enters the treatment space (column 2 lines 4-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard E. Abramowitz whose telephone number is 571-272-8557. The examiner can normally be reached on monday-friday 9:00-5:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TIMOTHY MEESKS
SUPERVISORY PATENT EXAMINER